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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,687	12/04/2003	Tsutou Asakura	25816	5664
20529	7590	05/17/2005	EXAMINER	
NATH & ASSOCIATES 1030 15th STREET, NW 6TH FLOOR WASHINGTON, DC 20005			DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/726,687

Applicant(s)

ASAKURA, TSUTOU

Examiner

Thoi V. Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 ~~is/are~~ rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0404</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1A, 1B, 2, 3A and 3B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 2 is objected to because of the following informalities: claim 2 should be dependent on claim 1 instead of claim 2 itself. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (USPN 6,057,894).

Re claim 1, as shown in Fig. 6, Kobayashi discloses an image display apparatus comprising:

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a white light source 31 for emitting white light in the form of a light beam of a prescribed cross-sectional area;

three spatial light modulating elements 41R, 41B and 41G for modulating three primary colors R, G and B respectively,

a focusing lens 34, 35 for focusing the light beam emitted from the white light source;

a primary means 32 (UV-IR cut filter) of adjustment for adjusting the color balance of the white light entering the focusing lens (col. 5, lines 58-64);

means of separating (dichroic mirrors 36R, 36G and 36B) and synthesizing (dichroic prism 43) for separating the three primary colors of light for which color balance has been adjusted with the primary means of adjustment, for directing light of the three primary colors to the three spatial light modulating elements 41R, 41B and 41G and for synthesizing light of the three primary colors modulated with the three spatial light modulating elements 41R, 41B and 41G (col. 5, line 66 through col. 10, line 26); and

means of projection (projection lens 44) for projecting light synthesized with the means of separating and synthesizing (col. 10, lines 22-26),

wherein, re claim 3, a glass rod 33 is provided between the white light source 31 and the focusing lens 34, 35 (col. 9, lines 57-61).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (USPN 6,057,894) in view of Kanaya (USPN 6,466,375 B1).

Re claim 4, as shown in Fig. 6, Kobayashi discloses an image display apparatus comprising a glass rod 33 provided between the white light source 31 and the focusing lens 34.

However, Kobayashi does not disclose a barrier member for blocking all wavelength regions of the white light in at least part of a light beam entering or leaving the focusing lens; and a secondary means of adjustment for adjusting the intensity of the white light in a light beam in which all wavelength regions are interrupted by the barrier member as recited in claim 2.

As shown in Figs. 1 and 3A-3C, Kanaya discloses an image display apparatus comprising a barrier member 23 (light blocking plate) for blocking all wavelength regions of the white light in at least part of a light beam leaving a pair of lens array 21, 22 (col. 4, lines 1-15 and col. 5, lines 27-64) and a secondary means of adjustment (filter 30 in Fig. 3B of filters 30B and 30G in Fig. 3C) for adjusting the intensity of the white light in a light beam in which all wavelength regions are interrupted by the barrier member 23 (col. 5, line 65 through col. 6, lines 17).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the image display apparatus of Kobayashi with the teaching of Kanaya by employing a barrier member for blocking all wavelength

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regions of the white light in at least part of a light beam leaving the focusing lens; and a secondary means of adjustment for adjusting the intensity of the white light in a light beam in which all wavelength regions are interrupted by the barrier member so as to prevent the leakage light and unnecessary color rays except for a predetermined color ray from entering the pixel corresponding to the predetermined color ray, and hence to improve a color purity and display a high quality image (col. 8, lines 49-52; col. 9, lines 16-18; and col. 9, line 65 through col. 10, line 4).

**Conclusion**

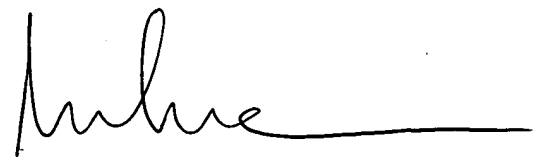
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong



05/14/2005



DUNG T. NGUYEN  
PRIMARY EXAMINER